

October 23, 2008

Ms. Susan Ruch  
Deputy Regional Director for Waste Prevention  
Massachusetts Department of Environmental Protection  
Northeast Regional Office  
205B Lowell Street  
Wilmington, MA 01887



Mr. Joel Blumstein  
U.S. EPA Region 1 - Mail Code SEL  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

Re: Notification Pursuant to EPA and DEP Audit Policies  
of Potential Violations of NPDES Permits  
Mirant Kendall Cogeneration Facility, Cambridge, Massachusetts  
NPDES Permit Number: MA0004898  
MSGP Permit Number: MAR05B926

Delivered via FedEx

Dear Ms. Ruch and Mr. Blumstein,

Mirant Kendall, LLC ("Mirant ") is notifying you, consistent with the United States Environmental Protection Agency's ("EPA") policy entitled "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations," 65 FR 19618 (April 11, 2000) and the Massachusetts Department of Environmental Protection ("DEP") "Policy for Incentives for Self-Policing Environmental Audit Policy" (Policy ENF-07.002) (collectively, the "Audit Policies") of possible instances of deviations from discharges previously disclosed in applications for the National Pollutant Discharge Elimination System (NPDES) Permit and the Multi-Sector General Stormwater Permit (MSGP) at the Mirant electric generating facility located at 265 First Street, Cambridge, Massachusetts (the "Facility").

Mirant has identified certain discharges to the Broad Canal that have not been previously identified in connection with the NPDES Permit or MSGP Permit. These issues first came to our attention as a result of a voluntary environmental audit performed by SEA Consultants, Inc., for which the preliminary results were delivered on October 3, 2008. The audit process has not been completed and the auditors and Mirant's internal staff are continuing to review the questions raised by the preliminary findings and conclusions of the audit. However at this point, Mirant Kendall has enough information to preliminarily identify the issues described below.

**Newly Identified Discharges:**

- 1) During the 2001 construction of the Combustion Turbine Building ("CT Building"), roof drains in the southwest portion of the plant were disconnected from the MWRA system

and redirected through a storm water outfall into the Broad Canal. As part of the audit, Mirant discovered that a small portion of the floor drain system in the southwest corner of the facility is connected into this roof drain system that flows into the Broad Canal. Equipment in the area of the floor drain system includes the labour pumps (river water) and condensate pumps (process water). Based on plant records, there have been no documented releases or spills into the floor drain system since redirection of the drains in 2001. Mirant plans on disconnecting and permanently sealing the floor drains in the area. A schedule for the work will be provided to EPA and DEP by November 3, 2008.

- 2) A portion of the steam from the blowdown tank vent condenses on a baffle plate, used to prevent precipitation from entering the blowdown tank, and allows the buildup of condensate on the roof. When it rains, this steam condensate discharges with rain water into the roof drain and ultimately flows into the Broad Canal. Mirant plans to remove the baffle plate and condensate drip piping to allow the steam to escape to the atmosphere. A schedule for the work will be provided to EPA and DEP by November 3.
- 3) The boiler blowdown tank piping includes a cross connection and valves which, if opened, would allow boiler blowdown to enter the roof drain system, and eventually discharge into the Broad Canal with the precipitation. Boiler blowdown is currently configured to discharge through an MWRA-permitted outfall, after receiving pretreatment that includes temperature reduction and pH neutralization. The blowdown tank and piping is original equipment, dating back to 1948. It is believed that the cross connection design was set-up to allow for the emergency bypass of the blowdown tank. There are no records indicating that the facility has ever discharged boiler blowdown to the Broad Canal. Mirant plans to remove the cross connection, and will provide a schedule for the work by November 3.
- 4) A drain line from the feed water heater historically drained into the roof drain system and ultimately into the Broad Canal with precipitation. This piping configuration was original equipment dating back to 1948, but was reconfigured in 2008 to drain into a MWRA-permitted outfall. This drain line served as an emergency drain line that was only utilized during equipment failures such as a tube rupture. Mirant estimates this drain line was utilized approximately five times in the last 30 years of the plant, during which approximately 500 gallons of steam condensate was discharged into the roof drain system. Mirant has removed the additional piping to prevent future accidental releases into the roof drain system, thus this discharge is now eliminated.
- 5) Mirant has three condensers (non-contact cooling water) each equipped with a steam driven venturi extraction system. The venturi extraction systems use steam as a working fluid to create a vacuum and extract excess air from the condensers. The steam is then quenched with either river water or potable water and is discharged into the inlet piping of the condensers, and eventually to NPDES 001. Under normal operating conditions these units are designed to operate for short periods of time, such as during start up or during a loss of vacuum inside the condensers. The amount of steam and quench water utilized by the venture extraction system in 2007 was approximately 1.5 million gallons. This number can vary significantly depending on the operation of the plant, to date in 2008 the facility has utilized approximately 0.55 million gallons of water for steam and

quench water. As the Mirant is in the process of contracting with an outside consultant to develop an acceptable engineering solution to this issue, and will provide a schedule for the work to EPA and DEP by November 3.

- 6) Each induced draft (ID) fan for the original boilers is equipped with a drain line that is connected into the roof drain system of the plant. There are three fans for the facility. The drain lines are believed to have been installed during the 1980s. Historically, the fans were washed with high pressure water to clean the fan blades. The cleaning was performed to remove ash build-up on the fan blades (associated with the burning of oil) and was performed approximately every six months. No chemicals were utilized as part of the cleaning. Following the installation of the combustion turbine and heat recovery steam generator unit in 2001, the boilers have not been used as frequently. Additionally, the facility has primarily utilized natural gas as a fuel, which has reduced the amount of ash build-up in the ID fans. As such, the ID fans have not been cleaned since 2001. Although this drain line has not been used in years, Mirant plans to remove the connection and re-route the drain line to the MWRA system to prevent future accidental releases to the roof drain system. Mirant will provide a schedule of this work to EPA and DEP by November 3.
- 7) Two of the three condensers at the facility are equipped with drain lines that discharge to the inlet side of the condensers, and eventually to NPDES 001. The condenser drains, original equipment dating from 1948, are used when the condensers are cleaned to remove biological growth from the river-water side of the condensers. The cleaning process involves a high pressure rinse of city water, with no added chemicals. Discharge through the condenser drains includes city water, algae build up, and any debris that is pulled into the condensers from the Broad Canal. The condensers are cleaned approximately four times per year and each cleaning generates about 200 gallons of wash water. In the future, Mirant will perform condenser cleaning using only filtered river water, which will then be returned to the river. Mirant is in the process of contracting with an outside consultant to develop an acceptable engineering solution to this issue, and will provide a schedule for the work to EPA and DEP by November 3.

Mirant's disclosure of these possible violations is subject to the Audit Policies. First, the discovery of the additional paths that may have discharged was both voluntary and the result of Mirant's implementation of a comprehensive environmental audit process, independent of any action by the government or any third-party plaintiff. Second, Mirant Kendall is promptly reporting the additional discharges, within the 21-day period described in the Audit Policies. As discussed above, Mirant received the preliminary results of the audit on October 3, 2008.

Mirant is working to disconnect and re-route the lines as appropriate, and will provide a schedule for this work to EPA and DEP by November 3, 2008. Given the complexity of the repair projects to be undertaken, some of the repairs will likely not be completed within the 60-day schedule outlined in the Audit Policies. Mirant will provide certification to the EPA and the DEP when the work has been completed. Once the work is completed, this problem will not reoccur, due to the steps that Mirant is taking in repairs, namely disconnecting and re-routing the lines as outlined above. Similarly, Mirant Kendall will review its current pending NPDES renewal applications to EPA and DEP and determine the extent to which those applications need

Mirant Kendall, LLC  
265 First Street, Cambridge, Massachusetts 02142-1214  
T 617 679 4800 F 617 354 1301

to be revised to reflect any previously unidentified discharges that will remain following these projects.

To our knowledge, the additional discharges did not result in environmental harm, since the majority of discharges were small and did not contain hazardous chemicals. In addition, these discharges did not provide any operational advantage or savings to Mirant; thus, Mirant did not obtain any economic benefit.

For all of these reasons, the Audit Policies are applicable to this situation. Mirant will submit any further information required to demonstrate that the conditions specified by the Audit Policies have been met by December 2, 2008.

If there are any questions regarding this issue, please do not hesitate to contact John Mesheau at 617.679.4818.

Sincerely,



James P. Garlick  
Senior Vice President, Operations

Cc: K. Boudreaux  
S. Konary  
D. Whitman  
L. Alden  
T. Keegan  
J. Mesheau  
J. Schanda